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TRUST PROBLEMS IN HOUSEHOLD OUTSOURCING

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ABSTRACT

This article addresses the issue of domestic outsourcing. We view outsourcing decisions as the result of utility-maximizing behavior on the part of households. Earlier studies have shown that households with more time constraints, the most common reason for outsourcing, do not always outsource more. To account for these unexpected empirical findings, we provide a new explanation for outsourcing decisions that focuses on trust problems associated with outsourcing household and caring tasks. Trust problems are related to the competence, values, and possibilities as well as incentives for opportunism on the part of the supplier of the product or service. Using insights from the transaction cost approach, new hypotheses are formulated on the influence of the problem potential on the make-or-buy decision (whether or not to outsource a task). The embeddedness of the supplier is introduced as a way to generate trust, thus decreasing the problem potential.

KEY WORDS • domestic outsourcing • embeddedness • transaction costs • trust problems

1. Introduction

The rise of women's labor force participation has brought about an increasing interest in the outsourcing of household and caring tasks. Outsourcing has become a well-known strategy for coping with the conflicting demands of paid and domestic labor by replacing unpaid household production with market substitutes. Obviously, outsourcing domestic tasks is not a new phenomenon. From the 18th to the early 20th century, it was common for the upper classes to have live-in servants (Strasser 1982; Bras 2002). Nowadays, there are various specialized outsourcing alternatives to take over elements of domestic work: takeout food, cleaning services, and even

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personal shoppers. Replacing household production by outsourcing alternatives has become increasingly viable in the United States (Hochschild 1997), Australia (Bittman et al. 1999), and The Netherlands (Tijdens et al. 2000).

In the social sciences, the outsourcing of household and caring tasks has been receiving increasing attention. Research has typically focused on whether households decide to outsource certain tasks (e.g. Bellante and Foster 1984; Oropesa 1993; Zick and McCullough 1996). The explanations for outsourcing behavior mainly focus on time and money: households with more time constraints and more financial resources are expected to outsource tasks more often than other households. However, having less time for domestic production does not always increase household outsourcing.

Addressing trust problems associated with outsourcing may provide additional insights into earlier findings. Although trust can be expected to play an important role in outsourcing decisions, the consequences of trust issues have been overlooked in earlier research. Trust problems may reduce the attractiveness of some outsourcing alternatives so that the expected effects of time and monetary constraints are not always observed. Outsourcing implies that an outsider is performing domestic tasks for a household, and the supplier actually enters the private domain of the household. A domestic helper often cleans people's homes when they are not there, thus creating incentives for opportunistic behavior such as putting less effort into certain tasks that are difficult to monitor. The supplier might have different ideas on how tasks should be done, or might lack expertise. Moreover, it is often difficult to judge whether a supplier has done a task correctly. These issues can have consequences for outsourcing decisions (see, e.g., Turksema 2000). Trust problems may make a household invest in safeguards to prevent problems, or may even deter a household from outsourcing certain tasks. In Australia, only 4% of the households hired anyone to do the cleaning in 1993/94, even though it is perceived as a very unpleasant task (Bittman et al. 1999). Not trusting a housecleaner may cause households to do the cleaning themselves and outsource more likeable tasks, such as food preparation (in the same Australian study, 90% of the households outsourced food preparation to some extent). In this article, organizational theories focusing on the anticipated transaction costs associated with exchanges are used to analyze how trust affects domestic outsourcing. Within this context,

the choice between doing one's own household production and outsourcing is referred to as a 'make-or-buy' decision.

Trust may not only influence households' make-or-buy decisions, it can also affect their choice of outsourcing supplier. Earlier studies on domestic outsourcing did not take the household's choice of supplier into account (with Spitze (1999) as an exception). Accounting for trust problems in the analysis of household outsourcing decision-making requires also considering the choice of supplier. In order to prevent problems, households may choose a supplier they trust or one that offers a guarantee. In this contribution, a distinction is drawn between formal and informal suppliers. In the event of *informal outsourcing*, relatives, friends, or neighbors perform tasks for the household (e.g. a grandparent taking care of the children when the parents are at work). The outsourcing relationship is embedded in a social relationship. This is also referred to as *within-network exchange* (DiMaggio and Louch 1998). We refer to employing a third party other than a relative, friend, or neighbor to perform household and caring tasks as *formal outsourcing*. In this case, the only connection between the buyer and the supplier is typically the outsourcing relationship. These formal outsourcing alternatives can be produced in the industrial sector, such as frozen meals, or in the service sector, such as the domestic helper or handyman (Tijdens et al. 2000).

This article focuses on the role of trust problems in two types of outsourcing decisions by households: *make-or-buy decisions* and *supplier choice*. The theoretical framework assumes that households make choices that follow from cost-benefit considerations, with constraints determining the choice set of households. Findings from earlier studies on the influence of monetary and time constraints are discussed. We show how accounting for trust problems may contribute to explaining these findings. Subsequently, hypotheses on the consequences of trust problems for make-or-buy decisions and supplier choice are derived from a transaction cost approach. Most of the hypotheses pertain to outsourcing in general. However, if different effects are expected for different tasks, they are specified explicitly.

1.1 Trust Problems in a Historical Perspective

There were trust problems in domestic outsourcing in the past when (usually female) live-in servants took over household tasks. In the

19th century, the servant problem was a major issue in the U.S.: 'Most servants put on airs, stole from their employers, left their positions without notice, and performed their duties without skill or care' (Strasser 1982: 163). The servant role was one of the most important occupations in all Western societies, such as the United States, Britain (Coser 1973; Strasser 1982), and The Netherlands (Bras 2002). Master–servant ties were conceived as primordial status relations rather than contractual arrangements (Coser 1973, Strasser 1982). Domestic outsourcing was a sign of wealth rather than a strategy to enable the wife to work. Wives would stay at home and coordinate the activities of their servants. Evidently, monitoring problems were less of an issue, since the wife kept a close eye on the servants. Servants were 'constantly observable not only when they worked but even when they did not, and hence were constantly under the master's control' (Coser 1973: 33).

Servants were usually young women who often left their parental homes and moved to the cities to become servants. There were many incentives to do well as a servant: it would give them more of a chance of becoming a servant in a wealthier family, where they would learn more about etiquette, fancy cooking and domestic skills, thus improving their position on the marriage market (Bras 2002). The lady of the house taught the servants these skills. When a new servant was hired, the household had to invest in teaching her these skills. The household thus depended on the servant, since the specific investments in her skills were high (Coser 1973). However, servants' jobs were short, and half of all the positions lasted less than a year (Bras 2002). Domestic service was a phase of life for young women before marriage, and was consequently of a temporary nature (Bras 2002).

Another risk factor for the household involved the opportunity for the servant to observe the master's behavior: the servant could potentially reveal intimate knowledge to outsiders (Coser 1973). This was an incentive for the household to invest in safeguards to ensure the loyalty of the servant. 'Only those [servants] who are fully absorbed can be fully trusted' (Coser 1973: 35). It was in the household's interest to develop strong emotional ties binding the servant to the master. To do so, the outsourcing relationship involved even more specific investments. To diminish the negative consequences of losing an investment, the master would try to isolate the servant, i.e. reduce outside ties (Coser 1973). In other words, it was in the master's best interest that the servant lived in

with the family. In the past, the servant role was not a part-time occupation, and therefore households would protect themselves by hiring a live-in servant. This created loyalty on the part of the servant, who could thus be monitored constantly.

In contemporary Western societies, households usually do not hire full-time servants. Instead, they buy specialized outsourcing alternatives or hire part-time domestic help. The incentives to have a live-in servant have disappeared, but new trust problems have arisen. The risk of modern, part-time servants revealing intimate information is now less of an issue. However, domestic helpers and babysitters often work when no household members are present, since their services are usually required to enable the wife to work outside the home. The constant observation of the servant is no longer possible, and monitoring problems have increased. Since households hire part-time help and live-in servants have become uncommon, the loyalty of these service workers has to be acquired in other ways.

2. Explaining Make-or-Buy Decisions by Households

In this section, make-or-buy decisions by households are considered. First, we discuss explanations from new home economics, where time constraints and monetary constraints are core variables. Results from earlier studies are discussed with reference to how trust may account for these findings. Then the consequences of trust problems for outsourcing decisions are addressed.

2.1 The Relative Costs of Outsourcing

In *new home economics*, the household is visualized as a small firm that produces commodities of value to itself (Becker 1981). These commodities are produced and consumed by the household using the household's time and money. Households can replace their own production with services or goods bought on the market. Outsourcing can be seen as replacing a household's own production, e.g. daycare replaces a mother taking care of her children. The outsourcing decision can be seen as the choice between household labor and the complete or partial outsourcing of a task.

The decision to opt for either household labor or outsourcing depends on several factors. Constraints determine the availability

and relative attractiveness of the alternatives. Within these constraints, the household chooses the production alternative that maximizes utility. This means the household chooses the alternative with the most favorable cost–benefit balance. In other words, the decision whether or not to outsource a task depends on the *relative costs* of household labor and outsourcing. Constraints with regard to money and time are discussed with reference to earlier studies.

2.1.1 Monetary Constraints

The potential income of the household constitutes the monetary constraints. The potential income indicates the *price of time* for household production. The monetary value of the household members' time creates a constraint for the possible earnings on the labor market. Rising wages make it more appealing to spend more time on the labor market. Outsourcing enables household members to use their time on the labor market. So the higher the household members' price of time, the more households can be expected to outsource their tasks.

An overview of earlier studies on the influence of monetary constraints on the use of outsourcing alternatives is provided in Table 1. This research is mainly focused on the influence of the price of time on using housekeeping services, eating food prepared outside the home, and childcare. New home economics treats the labor force participation of household members as endogenous because outsourcing decisions are related to time allocation decisions. If labor market participation is considered endogenous, the predicted wages indicate the price of time. However, in many empirical studies, labor force participation is assumed to be exogenous, implying that total income (personal or household) is used. If direct measures of the price of time are not available, education is often used as an indicator of the value of time.

The table shows that many studies find the expected relation between the price of time and outsourcing. The higher the household income or the price of time, the more likely tasks are to be outsourced. Most of the studies on housekeeping services find the expected effects of monetary constraints, especially the direct measures income and wage rates, on using housekeeping services (Bellante and Foster 1984; Oropesa 1993; You-Hyun 1993; Zick and McCullough 1996; Cohen 1998; Bittman et al. 1999; Tijdens et al. 2000), food away from home (Bellante and Foster 1984;

Soberon-Ferrer and Dardis 1991; Oropesa 1993; Yen 1993; You-Hyun 1993; Zick and McCullough 1996; Bittman et al. 1999) and childcare (Bellante and Foster 1984; Soberon-Ferrer and Dardis 1991; You-Hyun 1993; Van Dijk and Siegers 1996; Zick and McCullough 1996; Bittman et al. 1999). The effects of education are not always significant (e.g. Soberon-Ferrer and Dardis (1991) and Zick and McCullough (1996) do not find education effects for eating food prepared outside the home and childcare), probably because most studies control for direct measures of monetary constraints.

As is anticipated by new home economics, the effects of monetary constraints are strong for all outsourcing alternatives, including those involving trust problems, such as childcare and housekeeping services. Adding trust issues to the explanation would cause the effect of income on outsourcing decisions to be even stronger, since households have to invest more financial resources in safeguards to protect themselves, and reliable suppliers are often more expensive.

2.1.2 Time Constraints

The *demand capability* for household services (Coverman 1985), i.e. the volume of the housework and childcare, creates a time constraint for the household. With an increasing volume of household work, the time needed for household labor increases, as does the demand for time-saving outsourcing options. Indicators of housework volume are the type of dwelling (the amount of things to be cleaned) and the age and number of children. Families with more and younger children have a larger amount of housework and childcare to be done, and will make more use of time-saving services and products. However, the likelihood of outsourcing does not increase infinitely with the number of young children. At some point, the costs of daycare and other outsourcing options will exceed the gains of paid work, in which case households are more likely to have a stay-at-home parent than to outsource childcare and domestic tasks. This argument does not apply to all types of domestic and caring tasks. More and younger children decrease the likelihood of eating out, since it is a hassle to do so with them and is not really time-saving.

Although new home economics considers labor force participation an endogenous factor, empirical studies often include working hours as a time constraint and assume labor market participation

Table 1. Empirical results: effects of monetary constraints on outsourcing

				Dependent variables		
				House-keeping services	*Food away from home*	*Childcare*
Expected effects of indicators monetary constraints				+	+	+
Study	*Data set*	*Sample*	*Indicator*	*Findings*		
Bellante and Foster (1984)	1973 Consumer Expenditure Survey (U.S.)	3732 households	College-educated wife	+	+	n.s.
			Household income	+	+	+
Soberon-Ferrer and Dardis (1991)	1984/85 Consumer Expenditure Surveys (U.S.)	650 dual-earner households	Wife's education	+	n.s.	n.s.
			Wife's wage	n.s.	n.s.	n.s.
			Husband's wage	n.s.	+	+
Yen (1993)	1989 Consumer Expenditure Survey (U.S.)	4199 households	Wife's education		n.s.	
			Husband's wage and non-wage income		+	

You-Hyun (1993)	1990/91 Consumer Expenditure Survey (U.S.)	5158 households	Wife's education Household income	+ +	+ +	+ +
Zick and McCullough (1996)	1987/88 Utah Time Use Study (U.S.)	197 two-parent, two-child and 91 single-mother, two-child families	Mother's education Mother's (predicted) wage rate	n.s. +	n.s. +	n.s. +
Cohen (1998)	1993 Consumer Expenditure Survey (U.S.)	1917 couples, at least one working spouse (more than 20 hours)	Wife's income (in thousands) Husband's income (in thousands)	+ +	n.s. +	
Oropesa (1993)	1990 Market Facts Consumer Mail Panel (U.S.)	797 non-retired married women, < 65 whose husbands work full-time	Household income Personal income	+ +	+ n.s.	
Bittman et al. (1999)	1993 Household Expenditure Survey (Australia)	Not reported	Household income	+	+	+
Tijdens et al. (2000)	1993 Labor and Care (Netherlands)	1420 women age 25-45	Wife's education level Wife's income	+ +		
Van Dijk and Siegers (1996)	1993 Utrecht Data (Netherlands)	991 households	Wage rate mother Wage rate father			+ n.s.

+: positive effect, n.s.: effect not significant, blank: effect not studied.

Table 2. Empirical results: effects of the time constraint labor force participation on outsourcing

				Dependent variables		
				House-keeping services	*Food away from home*	*Childcare*
Expected effect of indicators labor force participation				+	+	+
Study	*Data set*	*Sample*	*Indicator*	*Findings*		
Bellante and Foster (1984)	1973 Consumer Expenditure Survey (U.S.)	3732 households	Wives' full-time employment	n.s.	+	+
			Weeks worked by wife	n.s.	+	+
Kim (1989)	1982/83 Canadian Survey	3511 married females	Working wives vs. non-working wives		+	
Soberon-Ferrer and Dardis (1991)	1984/85 Consumer Expenditure Survey (U.S.)	650 dual-earner households	Hours worked by wife	n.s.	+	+
			Hours worked by husband	n.s.	+	n.s.

You-Hyun (1993)	1990/91 Consumer Expenditure Survey (U.S.)	5158 households	Earner type Hours worked by wife	n.s. +	+ +	+ n.s.
Oropesa (1993)	1990 Market Facts Consumer Mail Panel (U.S.)	797 non-retired married women, < 65 whose husbands work full-time	Employment status (full- or part-time versus at home)	n.s.	n.s.	
Yen (1993)	1989 Consumer Expenditure Survey (U.S.)	4199 households	Wife's hours worked per week		+	
Cohen (1998)	1993 Consumer Expenditure Survey (U.S.)	1917 couples, at least one working spouse (more than 20 hours)	Wife's hours worked per week Husband's hours worked per week	n.s. n.s.	+ n.s.	
Bittman et al. (1999)	1993 Household Expenditure Survey (Australia)	Not reported	Dual earners versus single earners	+	+	+
Tijdens et al. (2000)	1993 Labor and Care (Netherlands)	1420 women age 25-45	Dual versus single earners	+		+

+: positive effect, n.s.: effect not significant, blank: effect not studied.

to be exogenous. To provide greater insight into earlier research, the results of studies on time constraints based on employment and outsourcing are discussed.

The results on the influence of labor market participation on outsourcing are summarized in Table 2. In most studies, the expected relation is found for food away from home and childcare (Bellante and Foster 1984; Kim 1989; Soberon-Ferrer and Dardis 1991; Yen 1993; You-Hyun 1993; Bittman et al. 1999; Tijdens et al. 2000). However, most studies find *no* effect of available time on using housekeeping services (Bellante and Foster 1984; Kim 1989; Soberon-Ferrer and Dardis 1991; Oropesa 1993).

Taking trust problems into account may help explain these findings. Outsourcing food preparation does not entail much of a trust problem: the supplier does not enter the private domain, and the quality of the food is relatively easy to check. Childcare and housekeeping services, however, do involve trust problems. The supplier either works in the home or takes care of the children outside the presence of household members, which increases the likelihood of problems. These trust problems might deter households from outsourcing if no reliable suppliers are available. Housekeeping services in the U.S. and The Netherlands are often arranged off the books, i.e. paid in cash with no official records of employment, and professional services are not as common as these *shadow economy* suppliers. In addition, one does not turn to relatives or friends for help with cleaning. Moreover, since cleaning is a flexible task, households may be more inclined to do the cleaning themselves if no reliable supplier is available.

For childcare, trust issues might lead households to turn to either care by relatives or professional childcare (daycare centers, play groups, employer-provided childcare). These two alternatives account for most of the outsourced childcare in the U.S. (U.S. Census Bureau 1999) as well as The Netherlands (Merens 2000). Off-the-books childcare alternatives are not as common, and while this type of outsourcing is used for structural childcare, it is also used for irregular childcare, such as a babysitter for one night. In the U.S., non-institutionalized care by non-relatives is used relatively often, although it has been decreasing over time (in 1999, 20.3% of the employed mothers of pre-schoolers used this type of care, compared to 28.2% in 1985; U.S. Census Bureau 1999). Trust problems will probably not deter households from outsourcing childcare, but may cause them to choose professional daycare or

unpaid care by relatives. Note that there are availability problems as regards housekeeping services as well as childcare, so this issue cannot account for the different effects of time constraints for the two tasks.

In earlier studies, the expected effects of housework volume as an indicator of time constraints (Table 3) are found only for childcare (Bellante and Foster 1984; Soberon-Ferrer and Dardis 1991; You-Hyun 1993; Zick and McCullough 1996). Most of the studies do not confirm that the use of housekeeping services depends on housework volume (Soberon-Ferrer and Dardis 1991; You-Hyun 1993; Zick and McCullough 1996; Cohen 1998). Regarding food away from home, having young children even seems to have the opposite effect (Bellante and Foster 1984; You-Hyun 1993; Zick and McCullough 1996; Cohen 1998). This may indicate that other considerations are important for eating out. Eating out in a restaurant with young children is not convenient. The importance of the home-cooked meal in households with young children (children should eat properly), or the price of food prepared outside the home (no scale benefits), may also deter households from eating out.

As in earlier studies on labor-force participation, the expected effect of housework volume as an indicator of time constraints is usually not found for housekeeping services, though it is found for childcare. Trust problems may explain this, since households have to rely on suppliers who work off the books for housekeeping services, while professional childcare or care by relatives is often available. Especially since housekeeping is a flexible task, trust considerations may lead households to prefer to do their own cleaning. With respect to eating out, convenience issues may cause families with young children to do so less often.

2.2 Trust Problems

Earlier studies show that new home economics predictions are not always confirmed. Trust problems may account for these findings, since they influence the expected costs and benefits of outsourcing. Households cannot always fully assess the quality of an outsourcing alternative, and thus run a risk when they outsource a task. The risk may deter households from outsourcing or lead them to invest more in finding a reliable supplier, especially if something valuable is at stake. Uncertainty can sometimes even lead to seemingly irrational behavior: in the U.S., even though childcare by relatives has been

Table 3. Empirical results: effects of the time constraint housework volume on outsourcing

				Dependent variables		
				House-keeping services	*Food away from home*	*Childcare*
Expected effects of indicators housework volume				+	+	+
Study	*Data set*	*Sample*	*Indicator*	*Findings*		
Bellante and Foster (1984)	1973 Consumer Expenditure Survey (U.S.)	3732 households	Young children	+	−	+
Soberon-Ferrer and Dardis (1991)	1984/85 Consumer Expenditure Survey (U.S.)	650 dual-earner households	Young children	n.s.	n.s.	+
Yen (1993)	1989 Consumer Expenditure Survey (U.S.)	4199 households	Household size		+	

You-Hyun (1993)	1990/91 Consumer Expenditure Survey (U.S.)	5158 households	Oldest child < 6	n.s.	−	+
Zick and McCullough (1996)	1987/88 Utah Time Use Study (U.S.)	197 two-parent, two-child and 91 single-mother, two-child families	Age youngest child	n.s.	+	−
Cohen (1998)	1993 Consumer Expenditure Survey (U.S.)	1917 couples, at least one working spouse (more than 20 hours)	No. children < 2 No. children 2–15	n.s. n.s.	− −	
Bittman et al. (1999)	1993 Household Expenditure Survey (Australia)	Not reported	No. children 0–1 No. children 2–4 No. children 5–14	+ + +	− − +	+ + +
Tijdens et al. (2000)	1993 Labor and Care (Netherlands)	1420 women age 25-45	No. children	+		
Van Dijk and Siegers (1996)	1993 Utrecht Data (Netherlands)	991 households	No. children			+

+: positive effect, n.s.: effect not significant, −: negative effect, blank: effect not studied.

found to be of poorer quality than formal childcare, many households still prefer to outsource childcare informally.[1]

Three kinds of trust problems can arise in domestic outsourcing. First, a supplier may not be *competent* enough to perform a task properly due to a lack of resources, knowledge, skills, or expertise (Batenburg et al. 2003). A household's inability to ascertain a supplier's inherent skills represents an 'adverse selection problem' (Akerlof 1970). For instance, a handyman may be unable to adequately solve a problem or may even worsen the situation. Second, the household and the supplier may have different ideas about how a task should be done (*values* about performance), regardless of competence. A supplier can perform a task unsatisfactorily due to different ideas on childcare or how things should be cleaned. The cleaning methods of many Latina domestic workers do not always measure up to their employers' requirements (Hondagneu-Sotelo 2001). Finally, a supplier may behave *opportunistically* and fail to live up to an agreement. This is referred to as the 'moral hazard problem' (Holmstrom 1979). Trust problems may arise whenever the interests of a supplier differ from those of a household.[2] For instance, a housecleaner may work shorter hours than agreed upon.[3]

The *transaction cost approach* is useful (Coase 1952; Williamson 1981, 1985) in assessing the influence of trust problems on outsourcing decisions. This theory describes the influence of trust problems or 'opportunism problems' on decision-making by firms. The transaction cost approach has been applied to the household before, usually in combination with insights from new home economics, e.g. in the area of contracting and financial arrangements in intimate relationships (Ben-Porath 1980; Pollak 1985; Treas 1991, 1993; Giesen 1999; Ludwig-Mayerhofer 2000; Treas and Widmer 2000).

2.2.1 The Transaction Cost Approach and Make-or-Buy Decisions by Households

The basic idea of the transaction cost approach is that transactions are assigned to governance structures by economizing on the anticipated costs for reaching and enforcing agreements (Coase 1952; Williamson 1981, 1985). Firms can protect themselves from problems by choosing a certain governance structure, such as the detailed contractual planning of a transaction, or by looking for a reliable

partner, which is accompanied by transaction costs. The properties of a transaction determine which governance structure is the least costly (Coase 1952; Williamson 1981, 1985). The most basic distinction can be drawn between the purchase of a service or good on the market and the use of own production (hierarchy): the make-or-buy decision (e.g. Walker and Weber 1984; Masten 1996; Monteverde and Teece 1996). If a firm is more likely to encounter problems when entering a transaction on the market and the damage it can suffer is higher, the firm will incur higher transaction costs to prevent problems. If these costs are higher, a firm is more likely to rely on own production. A relatively large amount of attention has been devoted to make-or-buy decisions by firms in the transaction cost literature (e.g. Walker and Weber 1984; Masten 1996; Monteverde and Teece 1996).

Regarding household labor, households are faced with similar make-or-buy decisions between their own domestic production and outsourcing. A household can assign governance structures to the production of its commodities: internal production versus procuring external goods and services. So households may engage in transactions with firms or individuals outside the household to produce their commodities. Households can protect themselves from problems by looking for a reliable supplier or demanding certain guarantees and safeguards, which usually impose additional costs. These costs, comparable to the costs firms invest when entering a transaction, decrease the relative attractiveness of outsourcing. If a household does not incur these costs although there is substantial risk associated with outsourcing, the consequences of outsourcing can be harmful for the household.

The make-or-buy decision is different for households than for firms. The family is a valuable good, and norms or feelings of privacy play an important role in considering childcare and household labor. Furthermore, if a firm relies on own production, internal trust problems may arise. Employees may behave opportunistically or act in accordance with their own goals rather than the goals of the firm. There can also be problems of this kind in the household, be it generally to a lesser extent. Household production directly attributes to the utility of the household members, whereas the consequences of opportunistic behavior at the workplace usually affect the employer. At firms, the internal divergence of goals between the employer and employee and among the employees themselves is presumably larger than in households. The consequence of the

differences between households and firms is that the 'make' option is more attractive for households than for firms.

2.2.2 The Likelihood and Consequences of Problems

The *likelihood* and potential *consequences* of trust problems both influence the make-or-buy decisions on the part of households. In the literature, these two elements of trust problems are described as the problem potential of a transaction (Batenburg et al. 2003). The likelihood of problems pertains to the supplier's opportunities and incentives to deliver a service or good that does not satisfy the demands of the household (DiMaggio and Louch 1998; Batenburg et al. 2003). The potential consequences refer to the costs for a household if a task is not performed correctly by a supplier, e.g. if a child is not properly taken care of. If the problem potential of a certain task is higher, the household will be less likely to outsource this task. The problem potential depends on four elements, i.e. information asymmetry, one-sided dependence, valuable assets, and damage potential. Household characteristics and task characteristics that can serve as problem potential indicators are discussed below. Household characteristics influence the likelihood that a given task will or will not be outsourced, while task characteristics pertain to the likelihood of outsourcing a certain task exceeding the likelihood of outsourcing another task, given the household characteristics.

Information Asymmetry

The first indicator of the problem potential is the *information asymmetry* between the household and the supplier (DiMaggio and Louch 1998). The relationship between the household and the outsourcing supplier can be seen as an agency relationship, where the household (the principal) engages another person (the agent, in this case the supplier) to perform some service that involves delegating some decision-making authority to the agent. Information asymmetry implies that one partner in the exchange, in this case the supplier, has more or better information. This information asymmetry creates opportunities for the supplier to deliver a good or service of inferior quality, and is also referred to as uncertainty (Williamson 1981, 1985) or monitoring problems (Batenburg et al. 2003).

Information asymmetry depends on problems of monitoring effort and problems of monitoring quality. Both types of monitoring problems decrease the likelihood of outsourcing. Problems in monitoring *effort* are indicated by the presence or absence of household members when the supplier is performing the task. The behavior of domestic helpers cannot be monitored if they work when no one is at home. Whether household members are present depends on the household and the type of task. Households differ to the extent that their members are able to stay home to monitor the supplier. This in turn depends on job characteristics such as full-time employment or the difficulty of taking time off for an appointment with someone like a handyman. If households outsource to enable labor market participation or save time, it is unlikely that they will invest time in monitoring the effort. The most direct way to measure this household indicator is by asking whether household members would be able to stay at home if they outsourced certain tasks. The presence of older children also provides an opportunity to monitor the supplier to some extent. On rare occasions, households may even install video equipment to monitor a babysitter or housecleaner. Surprise visits or 'markers' such as specially placed dirt are other ways to check a supplier's effort (e.g. Hondagneu-Sotelo 2001). Households may also engage in trial transactions with direct monitoring before they decide to hire a supplier for a longer period or for a large chore, for example by watching a babysitter interact with the children (Hondagneu-Sotelo 2001).

The possibility of household members being present when the supplier is working also depends on the type of task. If it is not possible for household members to stay home during a task, the household is less likely to outsource it. This is only an issue for tasks that have to be done at home, indicating that the household at least has the option of being present. The difference in monitoring effort also depends on the recurrence of the tasks. For non-recurrent tasks such as home maintenance, households often have to stay home simply to let the supplier in. This does not mean everyone stays home; some households may leave their key or even give it to the suppliers in advance if they trust them. For home-based recurrent tasks such as cleaning, households have the option of staying home. However, people often feel uncomfortable being home when a domestic helper is doing the cleaning (Hondagneu-Sotelo 2001). In addition, so much time would have to be invested in monitoring the effort that it would be more attractive for the household

members simply to do the cleaning themselves. It is evident that parents' presence is not feasible during childcare, otherwise the outsourcing would not be necessary in the first place. For non-recurrent tasks such as home maintenance, direct monitoring is far more likely. Since it is not always possible to monitor certain recurrent tasks, households may actually refrain from outsourcing these tasks (e.g. cleaning) or choose a trustworthy supplier if a recurrent task has to be done at certain times (e.g. childcare). Monitoring effort is not an issue for outsourcing alternatives that are not home-based, such as meal preparation.

The second indicator of information asymmetry is the difficulty of monitoring the *quality* of the outsourcing output. Even if effort is being monitored, uncertainties about the quality of the service may arise. There are indicators of quality uncertainty at the household as well as the task level. The capability of household members to judge output quality varies among households and depends on the household members' expertise or evaluation skills. Having more expertise increases the capacity to judge output quality and increases the likelihood of outsourcing. Even if practical skills are not very well developed, evaluation skills can prevent problems monitoring the quality and increase the likelihood of outsourcing. However, if households cannot perform a task themselves, quality uncertainty does not influence the outsourcing decision. Due to a lack of skills, the household *has to* outsource the task, in which case the degree of uncertainty will influence the supplier choice. This issue is addressed in the following section.

The quality of a supplier in performing certain tasks is difficult to monitor if the result is visible only after a certain period of time. This monitoring problem decreases the likelihood of outsourcing. A painter can easily use low-quality paint. The result might look good when the painter has just finished his task, but the paint may start to flake after a couple of months. In general, chores involve a high degree of quality uncertainty: repairing leaks, replacing pipes, painting, installing a shower and so on. The quality of childcare for young children is also difficult to judge, especially if the child is not able to talk about it. Outsourcing care for young children thus involves more uncertainty than outsourcing care for older children. Therefore, care for young children is less likely to be outsourced than care for older children. When outsourcing care for young children, households may be more inclined to ask a trustworthy supplier, e.g. relatives or friends. Nannies and babysitters may be used

relatively more often for older children. Outsourcing cleaning and meal preparation, however, does not involve a high degree of quality uncertainty. Cleaning is almost always easy to judge: you can see whether the domestic helper has done the laundry, the dusting and vacuuming, or the dishes. Judging the taste and quality of a meal is fairly easy, and it is only on rare occasions that one cannot tell if food has gone bad or contains dangerous ingredients.

One-sided Dependence

The second element of the problem potential is the *one-sided dependence* of the household, i.e. the extent to which the household is dependent on the supplier without the supplier being dependent on the household. This dependence arises if the costs of finding another supplier are high and affect the opportunities and incentives of the supplier to take advantage of the information asymmetry (Williamson 1981, 1985). This depends to a large extent on the specific investments or assets involved (Williamson 1981, 1985). The more relationship-specific investments are involved, the higher the relative costs of outsourcing. Specific assets arise in an outsourcing relationship if investments are made that are largely useful only in that particular buyer–supplier relationship and lose value if the relationship is terminated. In that case, the exchange relationship is dependent on the identity of the exchange parties (Ben-Porath 1980). Outsourcing transactions accompanied by these kinds of investment create 'lock-in' effects, which are the result of increased switching costs (Williamson 1985; Monteverde and Teece 1996). Examples of specific investments are the relationship a child develops with a babysitter, and the knowledge of the babysitter concerning the values of the household regarding childcare. If the outsourcing relationship ends, the new babysitter will again have to develop a relationship with the child. Another example is the domestic helper who knows what has to be cleaned and how. If a new domestic helper is hired, the household will have to invest time in explaining the activities.

A household indicator of specific investments is the value households attach to the process of domestic and caring work (process values). Some households attach less value to how tasks are performed than others, and thus have to invest less in explaining how they want things done. If parents are very strict about how their children are to be raised, they will invest more in transferring their

ideas to the babysitter or daycare worker. Stricter process values thus increase the specific investments in outsourcing and decrease the likelihood of outsourcing. Output standards on domestic and caring tasks are also important, e.g. if higher levels of cleanliness are required, the household will have to invest more time in informing the supplier.

One task indicator for the required specific investments is recurrence. There are one-time tasks, such as those a plumber or a painter does, but others, like those of a regular babysitter or a housecleaner, involve a long-time relationship and require more investments in the relationship. Non-recurrent tasks are more attractive to outsource, since fewer investments have to be made. This expectation reinforces the argument that non-recurrent tasks involve fewer monitoring problems than recurrent ones, thus making outsourcing more likely. When outsourcing housecleaning, a recurrent task, the incumbent's duties are dependent on the personal relation with the employing household (Coser 1973). Outsourcing meal preparation is an exception, since this involves a recurrent task with varying suppliers with whom there is no dependent relationship. Since other recurrent tasks do involve specific investments, households are more inclined to outsource meal preparation than cleaning or childcare.

Valuable Assets and Damage Potential

Lastly, the *valuable assets* of a household and the *damage potential* are elements of the problem potential. The more valuable assets a household has, the more incentives the supplier has to behave opportunistically and the higher the possible damage associated with outsourcing. Valuable assets are a household characteristic and damage potential is a household as well as a task characteristic. The relative attractiveness of outsourcing decreases with higher damage potential and more valuable assets.

As regards home-based tasks, the more valuable assets a household has at home, the greater the problem potential and the smaller the likelihood of outsourcing. The consequences of having assets not only have to do with the chance of someone stealing them, they also have to do with the damage there can be if the supplier breaks something. The more valuable assets a household has at home, the greater the damage will be if something breaks or is stolen. A comparable argument in the transaction cost literature refers to the financial volume of a transaction (Blumberg 1997; Batenburg et al. 2003).

Another household indicator of valuable assets is an immaterial asset, i.e. the domestic standard of a household, e.g. with regard to childcare, cleanliness, or food preparation. Households with higher domestic and care standards are less likely to outsource their tasks. These standards depend on the level of performance household members will tolerate (Bianchi et al. 2000). This adds to the hypothesis that people with higher standards have to invest more in specific assets. The damage potential if a supplier behaves opportunistically is also higher, because the household attaches greater value to its domestic output.

The damage potential associated with various tasks is also expected to be important in outsourcing decisions. The higher the damage potential associated with a task, the less likely a household is to outsource it. If a domestic helper does not clean very well, this does not involve serious damage. But if something goes wrong at the daycare center, the consequences can be far more serious. As regards home maintenance, the damage potential varies from one chore to another. If the whole house is painted instead of just one single room, a mistake can have very serious consequences, and repairing a large leak properly is more urgent than a periodic boiler check. Households are more likely to outsource chores that involve low damage potential. Again, this task indicator influences supplier choice rather than the make-or-buy decision for households without the skills to perform certain tasks themselves.

Table 4 summarizes the hypotheses on the effects of trust problems on the likelihood of outsourcing.

3. The Choice of Outsourcing Supplier

New home economics simply assumes that households are indifferent about suppliers, but if we include trust problems in our explanation of outsourcing behavior, we have to take the question of supplier choice into consideration. If outsourcing involves a substantial risk, it does not necessarily mean the household will opt for its own household production. In addition to the make-or-buy decision, supplier choice can also be regarded as a choice between alternative governance structures. Suppliers differ in the extent to which they can offer guarantees and certainties about the quality of a product or service or can be trusted because of prior experience

Table 4. Expected effects of problem potential indicators on the likelihood of outsourcing

Theoretical concept	*Expected effect on likelihood of outsourcing*	*Household indicators*	*Task indicators*
Information asymmetry	–		
Problems monitoring effort		Possibility to be present	Recurrence task
Problems monitoring quality		Evaluation skills Age of children	Visibility quality
One-sided dependence	–		
Specific investments		Process values Domestic and caring standards	Recurrence task
Valuable assets and damage potential	–	Material assets Domestic and caring standards	Damage potential task

with the supplier or information from others. *New economic sociology* (Granovetter 1985; Smelser and Swedberg 1994) addresses the effect of the embeddedness of the relationship between the buyer and supplier. The embeddedness argument emphasizes 'the role of concrete personal relations and structures (or ''networks'') of such relations in generating trust and discouraging malfeasance' (Granovetter 1985: 490). Another way to deal with risks is by choosing a supplier that offers safeguards, such as guarantees or quality marks. These safeguards are a substitute for trust in the relationship between the household and the supplier.

3.1 Costs of Economic and Social Exchange

Basically, there are two kinds of suppliers and these can be characterized by different kinds of exchange relations. *Formal* outsourcing is related to economic exchange and *informal* outsourcing to social exchange.[4] In economic exchange, money is used as a substitute for the promises of one party in the exchange (Coleman 1990). Economic exchange occurs if a household pays the party that has delivered an outsourcing alternative to the household. A domestic helper who works for pay without a contract but does not have a

social relationship with the household engages in economic exchange with the household. In social exchange, social obligations are created, e.g. if relatives or friends look after the household's children. According to Blau (1968), 'a person who derives benefits from associates is under the obligation to reciprocate by supplying benefits to them in turn . . . and they thereby create social obligations' (p. 452). Social and economic exchange are both characterized by the expectation that the benefits rendered will yield returns (Blau 1964, 1968). However, in social exchange usually the size and the moment of the 'payment' of the obligation are left unspecified. The embeddedness of the exchange in a social relationship creates the expectation that the obligation will be fulfilled. Specifying the return in advance reduces the social nature of the relationship (Blau 1968), where trust is an important element.

Different kinds of costs are related to formal and informal outsourcing. Informal outsourcing creates social obligations, and the household is strongly dependent on the supplier (the obligation has to be 'paid' to the same person). Formal outsourcing is accompanied by financial costs. These costs generally increase if more safeguards are desired. It can be expected that the costs of informal outsourcing increase in comparison to costs of formal outsourcing with increasing wage rates of the household members. Paying back social obligations takes time, and the costs of these obligations become higher with an increasing wage rate. Therefore, it could be expected that informal outsourcing is less attractive when time is costly. Research on the combination of work and family has shown that managers use paid services to meet their family demands, while factory workers often (have to) rely on their relatives for help (Hochschild 1997). However, this can also be expected because people with higher wage rates tend to have greater geographic mobility, which decreases the availability of informal help. In order to unravel the effects of the costs of social exchange, it is important that the local availability of informal help is taken into account.

The price of the informal supplier's time is also important. The higher the price of the informal supplier's time, the greater the social obligation, since the costs of the supplier's investment are higher. Hence, the household itself will have to invest more time in reciprocating the social obligation, which decreases the relative attractiveness of informal outsourcing. An indicator of the size of the social obligation is the informal supplier's wage rate.

3.2 Embeddedness of the Outsourcing Relationship

Embeddedness involves learning and control effects (Buskens 2002; Buskens and Raub 2002) that can facilitate exchange between two partners, in this case a household and an outsourcing supplier. There are two types of embeddedness, dyadic and network embeddedness. *Dyadic embeddedness* means a transaction is embedded in an ongoing relationship. It can be an outsourcing or some other kind of relationship between a household and a supplier. Informal outsourcing always involves dyadic embeddedness; the outsourcing relationship is embedded in a social relationship. If an employer offers services such as daycare to his employees, the outsourcing relationship also entails dyadic embeddedness. *Network embeddedness* is the extent to which actors are linked to third parties in a social network (Raub and Weesie 1990). A household and a supplier can have mutual friends or relatives, or a household can have contact with the supplier's other buyers.

There are *learning effects* if a household acquires information about the incentives, abilities, and values of a supplier. It can be information about the supplier's trustworthiness and the household may also receive information about the supplier's skills and values. A household can have bought a service or product from the same supplier before, or might be acquainted with the supplier and know whether he is trustworthy or not. This learning effect is related to the dyadic embeddedness of the outsourcing relationship and is referred to as the 'shadow of the past' (Batenburg et al. 2003). Network members who know the supplier may also provide information about his behavior or qualities. This is a learning effect from the network embeddedness of the outsourcing relationship. It is also important who provides the information; the more embedded the relationship with the information provider, the more valuable the information. However, information from one's own experiences with a supplier is usually better than and preferred to information from others (Granovetter 1985).

Control effects involve the household's opportunities to sanction a supplier in case of malfeasance. Control effects mitigate strategic trust problems. Possible sanctions related to the dyadic embeddedness of a relationship are termination of the relationship (e.g. in the case of formal suppliers or friends) or worsening of the relationship (e.g. in the case of relatives). The influence of expectations of future transactions is referred to as 'the shadow of the future'

(Axelrod 1984). The benefits of a mutual future are especially strong if there are expectations of long-term engagement, such as a family connection between the supplier and the household. An example of a control effect of network embeddedness is that the household may tell others about its positive or negative experiences with the supplier. Summarizing, the higher the problem potential, the more likely the household is to choose an embedded supplier.

Next, consider learning and control effects associated with formal and informal outsourcing. The choice of a supplier depends on the degree of embeddedness, and the higher the risk, the more likely a household is to choose an embedded supplier. Informal outsourcing is generally assumed to incorporate a higher level of embeddedness than formal outsourcing, since the outsourcing relationship is always embedded in an ongoing social relationship in the case of informal outsourcing. Of course, the choice between formal and informal outsourcing and the degree of embeddedness is relevant only if the respective alternatives are available.

3.2.1 Embeddedness of Informal Suppliers

The embeddedness of the outsourcing relationship in a social relationship decreases the risk associated with outsourcing tasks. Social exchange relations provide dyadic embeddedness and embeddedness in a network of friends or relatives. According to Pollak (1985), the advantages of using an informal supplier follow from the ability to integrate the outsourcing activities performed by friends or relatives with pre-existing, ongoing, and significant personal relationships.

Information benefits are acquired through the household's own experience with the supplier, in this case via the existing social relationship. Information can also be attained from other network members, such as mutual friends or relatives. A control effect emerges due to expectations of future engagement (Pollak 1985). Since personal relationships are intertwined with help in household and caring tasks, there are rewards and sanctions (i.e. control mechanisms) that are unavailable in other types of relationship. There are also monitoring advantages, since the networks of relationships involving relatives or friends and the outsourcing activity are integrated (Pollak 1985). Moreover, altruism and loyalty serve to limit opportunistic behavior (Ben-Porath 1980; Pollak 1985). Because of these learning and control advantages, households probably put more trust in their personal contacts than in a third, unknown

party. Network members also often have similar values, which reduces the trust problem involving values regarding the performance of tasks.

However, not all informal relationships encompass the same degree of trust. Trust between social exchange partners is indispensable to facilitate informal exchange. The possibility of social exchange depends primarily upon the strength of the social relationship (Caplow 1984: 1315–16), which can be established by kinship or through the process of exchange itself (Blau 1964, 1968; Ekeh 1974). This is why relationships involving prior social exchange or kinship are more likely to be used for informal outsourcing. Informal suppliers differ in the degree of embeddedness, and the choice of a supplier depends on the risk associated with outsourcing. If a high problem potential is involved, households will choose an informal supplier with a higher level of embeddedness (given informal outsourcing).

3.2.2 Embeddedness of Formal Suppliers

Informal outsourcing is not always feasible. Relatives or friends often do not have time to help, for example when they have a full-time job. Furthermore, for some tasks it is important that the household can rely on help at certain times of the day. For example, when outsourcing childcare, help is often needed at set times (during working hours), and informal help may not be available at these times. In addition, sometimes the household's own labor simply is not an attractive option. For instance, childcare is so time-consuming that household members cannot fully participate on the labor market if they provide it themselves. In that case, the household's own labor is so expensive in terms of forfeited earnings that outsourcing is an attractive alternative. In short, households sometimes have to rely on formal outsourcing, in which case households can protect themselves from potential problems by choosing an embedded formal supplier or a supplier who offers safeguards such as guarantees or quality marks. Households may use their network to estimate the reliability of potential transaction partners they have no direct relationship with (DiMaggio and Louch 1998; Buskens 2002). This is the learning effect of network embeddedness, which also applies to formal outsourcing. Network embeddedness decreases the costs of information (Blumberg 2001), which in turn decreases the costs associated with outsourcing. If a high problem

potential is involved, suppliers recommended by network members are preferred to unknown anonymous suppliers. Learning effects from dyadic embeddedness are likewise important; if a household has used the services of a supplier before, the household knows what the quality of the service is. Information on formal suppliers can thus also be acquired through dyadic embeddedness.

Control effects also emerge in long-term formal relationships. A household can terminate a relationship if the supplier does not deliver a good product. In addition, the outsourcing relationship can be embedded in another formal relationship. In the case of employer-facilitated childcare, the outsourcing relationship is embedded in the employment relationship. The employer has incentives to provide high quality childcare because the employee can sanction them by ending the employment relationship or by putting in less effort at work. Whether an employer buys childcare spaces or provides childcare on their own premises, there are incentives for them to provide good childcare. Network embeddedness can also provide opportunities to spread negative or positive information about a formal supplier. In the case of employer-facilitated childcare, the employee may talk about his or her experiences to other employees. Another control effect related to formal suppliers is monitoring by the supplier's colleagues. If a supplier works in a group (e.g. at a daycare center), there are fewer opportunities for the supplier to shirk his or her duties because it is riskier.[5] This is usually the case for professional outsourcing services. Domestic workers and handymen who work off the books more often work alone and have more opportunities to shirk their duties. However, this effect is not related to dyadic or network embeddedness of the transaction between household and supplier; it is better viewed as a safeguard for the household and is often accompanied by financial costs for the household through a higher price of outsourcing.

The hypotheses on supplier choice are summarized in Table 5.

4. Concluding Remarks

Costs in terms of time and money are not the only determinants of household outsourcing decisions. Earlier studies show that time constraints do not always increase the likelihood of outsourcing: the expected effects are not found for housekeeping services, though they are observed for childcare. Trust problems may account for

Table 5. Expected effects of social exchange costs and problem potential on the likelihood of informal outsourcing and effects of problem potential on supplier embeddedness

Theoretical concept and indicators	*Expected effects on likelihood of informal outsourcing*	*Expected effects on supplier embeddedness (given formal or informal outsourcing)*
Costs of social exchange		
Wage rate household members	–	No prediction
Wage rate informal supplier	–	No prediction
Problem potential		
Information asymmetry	+	+
One-sided dependence	+	+
Valuable assets and damage potential	+	+

this finding: domestic help is often arranged off the books, and childcare by relatives or professional services is quite common. If households are unable to find a reliable supplier, they may decide not to outsource despite their time constraints. These findings demonstrate the importance of trust in outsourcing. Domestic outsourcing implies that an outsider performs tasks for the household and the supplier enters the private domain of the household, which may involve substantial trust problems. These trust problems are especially important in the household: the family is a 'valuable good', and norms and feelings of privacy are important in childcare and domestic labor. In the outsourcing literature, usually based on new home economics, the consequences of these trust problems have been overlooked.

We use insights from the transaction cost approach and new economic sociology to explain the outsourcing behavior of households. Although these theories are usually applied to other research fields, they are applicable to households as well. The hypotheses pertain to the influence of household and task characteristics on household make-or-buy decisions (the household's own labor versus outsourcing) and outsourcing supplier choices.

The 'Time Competition' research program (Van der Lippe and Glebbeek 1999) includes large-scale data collection in The Netherlands to test the hypotheses formulated in this article. These are

multi-actor data using interviews with a sample of employees and, if applicable, their partners (see Ultee and Ganzeboom (1992/1993) and Kalmijn et al. (1999) for earlier surveys with a comparable design). An overrepresentation of dual-earner households is desirable, since they are the ones that face serious time constraints and outsourcing is an especially realistic option for them. Respondents are interviewed about their outsourcing behavior with regard to several tasks: cleaning, cooking, home maintenance, and childcare. Their supplier choice is reconstructed: which formal and informal suppliers are realistic alternatives, and which suppliers do the households choose? A multi-methods design is used to gain more insight into the choices made by the households. Complementary to the interviews, a vignette experiment is held with the same households. This offers the opportunity to vary task indicators and test the theory at the task level. Earlier research shows that the effects of network embeddedness are difficult to analyze using survey data, since only indirect measures can be used (Buskens 2002). A vignette experiment (Rossi 1979) is a helpful instrument in analyzing choice behavior by presenting hypothetical situations to respondents. Since availability constraints limit the choice alternatives for certain tasks, a vignette study offers an opportunity to acquire a better understanding of the embeddedness effects on supplier choice.

NOTES

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1. We thank an anonymous referee for a suggestion on this issue.
2. For the sake of simplicity, we focus on incentives for opportunistic behavior by the supplier and not on incentives for opportunistic behavior by the household, such as not paying on time.
3. In The Netherlands, households and domestic workers usually agree on the number of hours rather than the tasks to be done.
4. There are also governance structures that do not involve pure social or economic exchange, such as neighbors who make explicit arrangements about exchanges or domestic helpers who work without a contract.
5. We thank an anonymous referee for bringing this point to our attention.

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